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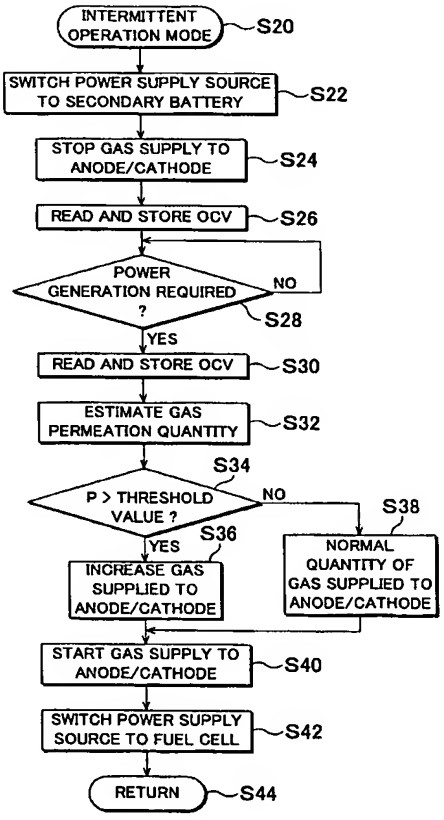
(54) Title: FUEL CELL SYSTEM AND GAS CONTROL METHOD



(57) Abstract: A fuel cell system including a fuel cell (20) that generates electricity through an electrochemical reaction between a fuel gas and an oxidizing gas is provided with a gas supply unit that supplies each of the fuel gas and the oxidizing gas to an anode (22) and a cathode (23) of the fuel cell (20), respectively by quantity corresponding to a load, a gas permeation quantity estimation unit (S32) that estimates a gas permeation quantity of at least one of the fuel gas and the oxidizing gas between the anode (22) and the cathode (23) after the power generation performed by the fuel cell (20) is stopped, and a correction unit (S36) that corrects a supply quantity of at least one of the fuel gas and the oxidizing gas each corresponding to the load in accordance with the estimated gas permeation quantity, which is to be supplied by the gas supply unit upon a subsequent start of power generation.

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